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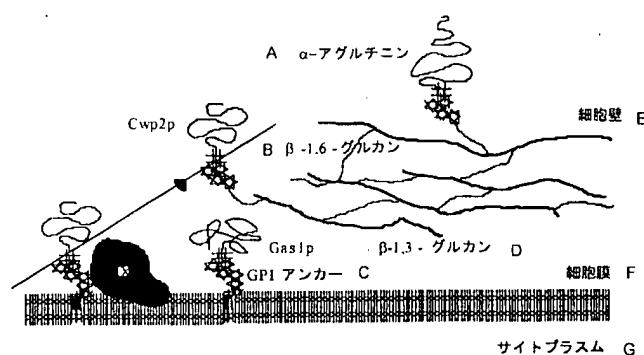
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(81) 指定国(国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT,

[続葉有]

(54) Title: METHOD OF SCREENING COMPOUND HAVING FUNGAL CELL WALL SYNTHESIS INHIBITORY ACTIVITY

(54) 発明の名称: 真菌細胞壁合成阻害活性を有する化合物をスクリーニングする方法



A...α-AGGLUTININ
B...β-1,6-GLUCAN
C...GPI ANCHOR
D...β-1,3-GLUCAN
E...CELL WALL
F...CELLL MEMBRANE
G...CYTOPLASM

(57) Abstract: By a simple binding assay with the use of a membrane fraction in which GWT1 protein is expressed, a compound inhibiting the transport of GPI anchor protein to fungal cell wall can be screened.

(57) 要約:

GWT1蛋白を発現した膜画分を用いた簡単な Binding assay により、GPIアンカーホテインの真菌細胞壁への輸送を阻害する化合物がスクリーニング可能となった。

Title: US-10-536-935A-1
Perfect score: 1497
Sequence: 1 atggcaacagtacatcagaa.....gaatattcattaagctataa 1497

RESULT 2

ADC18784

ID ADC18784 standard; DNA; 1497 BP.

XX

AC ADC18784;

XX

DT 18-DEC-2003 (first entry)

XX

DE Saccharomyces cerevisiae cell wall synthesis-related gene.

XX

KW screening; fungi; fungal cell wall synthesis-inhibition;

KW GPI anchor protein transport; antifungal agent; gene; ds; yeast.

XX

OS Saccharomyces cerevisiae.

XX

FH Key Location/Qualifiers

FT CDS 1..1497

FT /*tag= a

FT /product= "Saccharomyces cerevisiae cell wall synthesis-

FT related protein"

XX

PN WO2003058233-A1.

XX

PD 17-JUL-2003.

XX

PF 27-DEC-2002; 2002WO-JP013807.

XX

PR 28-DEC-2001; 2001JP-00401947.

XX

PA (EISA) EISAI CO LTD.

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PI Tsukahara K, Sato T, Nakamoto K, Tsuchiya M, Sagane K;

XX

DR WPI; 2003-627339/59.

DR P-PSDB; ADC18785.

XX

PT Method for screening compounds having fungal cell wall synthesis-

PT inhibitory activity by binding assay with a membrane fraction expressing

PT GWT1 protein to give inhibitors on transport of GPI anchor proteins.

XX

PS Claim 1; SEQ ID NO 1; 202pp; Japanese.

XX

CC The invention comprises a method for screening compounds with effects on
CC fungi. The method is useful for screening compounds having fungal cell
CC wall synthesis-inhibitory activity, to give inhibitors on the transport
CC of GPI anchor protein as antifungal agents. The present DNA sequence
CC represents a gene of the invention.

XX

SQ Sequence 1497 BP; 429 A; 269 C; 275 G; 524 T; 0 U; 0 Other;

Query Match 100.0%; Score 1497; DB 10; Length 1497;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 1497; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1

ATGGCAACAGTACATCAGAAGAATATGTCGACTTTAAAACAGAGAAAAGAG
GACTTTGTG 60



Db 1

ATGGCAACAGTACATCAGAAGAATATGTCGACTTTAAAACAGAGAAAAGAG
GACTTTGTG 60

Qy 61

ACAGGGCTCAATGGCGGTTCTATAACAGAAATTACAGCAGTGACATCAATTG
CTTTGGTA 120



Db 61

ACAGGGCTCAATGGCGGTTCTATAACAGAAATTACAGCAGTGACATCAATTG
CTTTGGTA 120

Qy 121

ACTTACATATCATGGAACTTATTGAAAAATTCCAACCTTATGCCTCCTGGCAT
TTCCAGC 180



Db 121

ACTTACATATCATGGAACTTATTGAAAAATTCCAACCTTATGCCTCCTGGCAT
TTCCAGC 180

Qy 181

GTGCAATACATAATTGATTTGCATTGAACCTGGGTTGCTTGCTTCTATCTATT
ACTATT 240



Db 181

GTGCAATACATAATTGATTTGCATTGAACCTGGGTTGCTTGCTTCTATCTATT
ACTATT 240

Qy 241
TATGCTAGTGAACCATACTTCTAAACACGCTAATACTGTTACCTTGTGCT
CGCATT 300


Db 241
TATGCTAGTGAACCATACTTCTAAACACGCTAATACTGTTACCTTGTGCT
CGCATT 300

Qy 301
ATATATGGAAAATTACTAGCTCGAGTAAACCTTCTAATCCAATATACAATAA
AAAAAAA 360


Db 301
ATATATGGAAAATTACTAGCTCGAGTAAACCTTCTAATCCAATATACAATAA
AAAAAAA 360

Qy 361
ATGATTACACAGCGGTTCCAACTAGAAAAAGCCGTATATTACTGCGTATC
GTGGTGGG 420


Db 361
ATGATTACACAGCGGTTCCAACTAGAAAAAGCCGTATATTACTGCGTATC
GTGGTGGG 420

Qy 421
ATGCTTATTCTGACTGCTATTGCCATCTGGCTGTAGATTTCCAATTTCCA
AGGAGG 480


Db 421
ATGCTTATTCTGACTGCTATTGCCATCTGGCTGTAGATTTCCAATTTCCA
AGGAGG 480

Qy 481
TTGCCAAGGTGGAAACTGGGGACATCCCTGATGGATCTGGTAGGAT
CATTGTT 540


Db 481
TTGCCAAGGTGGAAACTGGGGACATCCCTGATGGATCTGGTAGGAT
CATTGTT 540

Qy 541
TTCAGTAACGGTATTGTTCTAGGGCACTGTTGAAAAACCTAAGCTGAA
GAGTAAA 600


Db 541
TTCAGTAACGGTATTGTTCTTAGGGCACTGTTGAAAAACCTAAGCTTGAA
GAGTAAA 600

Qy 601
CCCAGCTTCTTAAAAATGCATTAATGCCTTAAAATCAGGAGGAACCTATT
GTTCTTA 660

Db 601
CCCAGCTTCTTAAAAATGCATTAATGCCTTAAAATCAGGAGGAACCTATT
GTTCTTA 660

Qy 661
GGATTGCTGAGGTTGTTTTGTAAAAAATTGGAATATCAAGAACATGTCAC
AGAATAT 720

Db 661
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AGAATAT 720

Qy 721
GGGGTTCATGGAAATTTTTATCACCTATCATTGTTGCCACTTGTATTGACC
TTTATT 780

Db 721
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TTTATT 780

Qy 781
GATCCCGTCACAAGAATGGTCCACGCTGCTCAATTGCAATTTCATTG
CATTTAT 840

Db 781
GATCCCGTCACAAGAATGGTCCACGCTGCTCAATTGCAATTTCATTG
CATTTAT 840

Qy 841
GAATGGCTACTTTAAAGGACGATCGCACTTAAACTTTAATTGGCTGA
TAGAAAT 900

Db 841
GAATGGCTACTTTAAAGGACGATCGCACTTAAACTTTAATTGGCTGA
TAGAAAT 900

Qy 901
TGTTCTCAGTCTAATAGAGAAGGCATCTCTCATTCTAGGTTATTGCTCG
ATTTTT 960


Db 901
TGTTCTCAGTCTAATAGAGAAGGCATCTCTCATTCTAGGTTATTGCTCG
ATTTTT 960

Qy 961
CTTGCCCCAAAACACGGATTACTTGTGGAAATAACCAACTTAA
ACAATCTT 1020


Db 961
CTTGCCCCAAAACACGGATTACTTGTGGAAATAACCAACTTAA
ACAATCTT 1020

Qy 1021
TATAAGCCTCTACGCAAGACGTAGTGCAGCATCAAAGAAGTCTCGACTT
GGGACTAT 1080


Db 1021
TATAAGCCTCTACGCAAGACGTAGTGCAGCATCAAAGAAGTCTCGACTT
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Qy 1081
TGGACTTCAGTAACCCCATTAAGTGGCCTCTGTATATGGAGTACAATTTCT
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Db 1081
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TGTTATC 1140

Qy 1141
AGCCAGTTGGTTTCAATACCATCCTTATAGTGTTCAGAAGGTTGCTAA
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Db 1141
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CTTACCA 1200

Qy 1201
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Db 1201

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ACTGAC 1260

Qy 1261

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AATCAAC 1320



Db 1261

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AATCAAC 1320

Qy 1321

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ATGTCT 1380



Db 1321

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ATGTCT 1380

Qy 1381

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CTGCTCA 1440



Db 1381

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CTGCTCA 1440

Qy 1441

TTCATAGCTGTCATATCGGTTTCTGTATAGAAAAAGAATATTCAAGCT
ATAA 1497



Db 1441

TTCATAGCTGTCATATCGGTTTCTGTATAGAAAAAGAATATTCAAGCT
ATAA 1497